## **ABSTRACT OF THE DISCLOSURE**

A system and method for monitoring cell voltages for a plurality of electrochemical cells connected in series forming a cell stack. The method includes dividing the cells into at least two cell groups, measuring the voltage across each cell group and estimating the minimum cell voltage for each group based on the average cell stack voltage and an estimated number of deficient cells in each group. The lowest minimum cell voltage for the entire cell stack is then determined.